

# Evaluation of Global Agenda: The Millennium Development Goals (MDGS)

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**Abstract** - This study assessed the trends in the global developments since inception of the agenda to precisely predict what the level of attainment would be at the end of the set duration. The methodology adopted includes the qualitative and quantitative research design methods based on secondary data. Analyses of data include 'Factorial Deviation' and 'Regression with coefficient of correlation'. The results showed that 'the sum of Measurement Of Deviation for each indicator ( $\Sigma MOD$ ), which deals with actual values of deficiencies and real attainments in all assessed indicators under each goal, is '+11.32'. A regression also performed on regrouped goals with equal number of indicators for variable 'X' and average value of 'MOD' for all the goals in the group for variable 'Y' is represented by the equation:  $Y = mX + c = 0.48X - 4.3$  and that the corresponding Ys for  $X_0$ ,  $X_6$ ,  $X_{8,9,6}$  and  $X_{14}$  are -4.30, -1.42, 0.00 and +2.42 respectively. The sum of XY of the regression line for  $X_6$  to  $X_{14}$  is +8.00. A coefficient of correlation 'r' of '+0.60' falls in the upper half of positive correlation between X and Y. The 'high value' agreement of the sum of MOD (also known as the attainment target index) value of '+11.32' and the sum of XY of the regression line for  $X_6$  to  $X_{14}$  of +8.00 are indications that by Y2015, the MDGs are attainable if current trends are at least maintained or positively intensified. The paper recommended that efforts must be made by the UN and other concerned global organizations towards ensuring that quantifiable data are available for the remaining 30% indicators (hence goals) and all those with negative '-ve' values must be improved upon unto positive '+ve' values, which can only be guaranteed by intensifying efforts for attainment of real '+ve' values. It concluded that with the UN Conferences and all that have been established to achieve particularly the MDGs among others, there is hope of greater improvement for humanity and our inhabited planet earth.

**Index Terms**- Environment, evaluation, sustainable development, United Nations, and urbanization.

## I. INTRODUCTION

Though the earth inhabitants have been subjected to severe unprecedented environmental, social and economic pressures et al over the past few decades up to year 2000, great concern for the deplorable situation of planet earth, considering then and the past made the UN and the world leaders to have met and deliberate in order to fashion the way forward the resultant Millennium Development Goals (MDGs) declared and adopted in 2000 by the United Nations (UN), promised a healthier environment and greater cooperation- a world in which developed and developing countries work in partnership for the betterment of all. The declaration established eight goals and time-bound targets by which progress can be measured. Such include halting what is unpleasant, reversing the negative trends, as well as sustaining what is pleasant in all the member states. The task was an enormous one involving assessment of the situation in the nations periodically.

### Statement of Research Problem

It has been observed that cities occupy only two percent of the earth's landmass; they contain fifty percent of the world's population, consume seventy-five percent of the world's resources and produce seventy-five percent of its waste [42]. The existence of many problems including Poverty, Hunger, High infant mortality, and Inadequate Social services, Health services, and Infrastructural facilities (including transportation, communication etc.) in the LDCs where population increase and high rate of urbanization are taken place is a signal to gathering catastrophe if adequate measures are not taken to provide solution to the problems. Population growth and distribution, the lifestyle, consumption patterns, and regions people inhabit and utilize directly have significant roles to play in the sustainability of the world's vast resources particularly the environment [44 and 9], among others.

The United Nations conferences and global summits [11] particularly, Conferences on Environment and Development (UNCED), also known as the Earth Summit,

Rio de Janeiro, Brazil, 2-14 June, 1992 [26]; Earth Summit+5 (1997): Special Session of the General Assembly to Review and Appraise the Implementation of Agenda 21, New York, 23-27 June 1997[25]; and the Millennium Summit [22 and 23] New York, 6-8 September, 2000; where world leaders et al all participated progressively to discuss solutions for global problems such as poverty, housing, war, and the growing gap between industrialized and developing countries. The central focus was the question of how to relieve the global environmental system through the introduction to the paradigm of sustainable development- a concept which emphasizes that economic and social progress depends critically on the preservation of the natural resource base with effective measures to prevent environmental degradation [42 and 9]. That was why the UN at the Millennium Summit made the Millennium declaration and set goals known as the Millennium Development Goals (MDGs) and time-bound targets to be achieved in order to liberate the world from total catastrophe. Hence the need to follow the trends in the pursuit of these goals is very crucial even before the expiration of the set time for realization.

### Research Questions

Questions asked for which this study seeks to provide answers are: What are the basic contents of each of the main issues in the agenda? To what extent has the main issues in the agenda been attained? What are the trends in the attainment of overall global development since inception of the agenda?

### Aim and Objectives of the Study

The aim of this study is to gain a better understanding of the trends in the global developments in order to be able to objectively predict the attainment of the agenda.

The more specific objectives to provide answers to the research questions include the followings:

- (i) To review the basic contents of each of the main issues in the agenda
- (ii) To examine the attainment of the main issues in the agenda
- (iii) To evaluate the trends in the attainment of global development since inception of the agenda and to predict the level of attainment at the end of the set duration.

### Justification for the Research

From inception of the agenda, it was considered an enormous but achievable task if we all work very hard for

its realization. Intermediate assessments at five and ten years after commencement showed possibility attainment of some of the targets while others showed likely impossibility of attainment of the targets at the end of the fifteen years duration for the entire agenda. This study is being conducted to establish precisely what the attainment is likely to be at the end of the entire set duration.

### Delimitation (or Scope) and Limitation of the Study

The scope of the study refers to the extent or boundary covered by the study, and includes all the over 190 UN member states including Nigeria. The study covers issues related to the UN Conferences/summits geared towards human, social, environment, and development, while the geographical context is made up of various continents where all the member states are located on planet earth. The limitation of the study is that there are some vital unavailable data- particularly on the indicators; a few had to be projected from the available data as the bases.

## II. THEORETICAL BACKGROUND/REVIEW OF LITERATURE

The literatures reviewed include those related to the United Nations (UN) Conferences/ Summits preceding and succeeding the MDGs, research methodology among others. The United Nations Conferences and Global Summits [13] particularly, Environment and Development (UNCED), also known as the Earth Summit, Rio de Janeiro, Brazil, 2-14 June, 1992; Earth Summit+5 (1997): Special Session of the General Assembly to Review and Appraise the Implementation of Agenda 21, New York, 23-27 June 1997; The Millennium Summit [22] New York, 6-8 September, 2000; World Summit on Sustainable Development Johannesburg, 26th August- 4th September, 2002; Progress towards the Millennium Development Goals, 2000-2005; UN Millennium Summit at UN Headquarters, New York 20-22 September, 2010 (Progress towards the Millennium Development Goals, 2000-2010).

### United Nations Conferences on Environment and Development (UNCED), also known as the Earth Summit, Rio de Janeiro, Brazil, 2-14 June, 1992

The roots of Earth Summit reach back to the UN Conference on the Human Environment in 1972, which put environment on the international agenda for the first time. By 1983, the relationship between economic development and its impact on the environment had become the subject of inquiry by the UN World Commission on Environment and Development, known as the Brundtland Commission.

In its 1987 report, *Our Common Future*, the Commission defined sustainable development as "that which meets the needs of the present without compromising the ability of future generations to meet their needs", and called for strategies for integrating environment and development [4 and 12]. As a result, the UN General Assembly decided in 1989 to hold a conference that would produce these strategies, and the UN Conference on Environment and Development, or Earth Summit, was held in Rio de Janeiro from 3 to 14 June 1992 [26].

Here in 1992 more than 100 heads of state met for the first international Earth Summit [24 and 26] convened to address urgent problems of environmental protection and socio-economic development. The assembled leaders signed the Convention on Climate Change and the Convention on Biological Diversity, endorsed the Rio Declaration and the Forest Principles, and adopted Agenda 21 (the Rio Declaration on Environment and Development, the Statement of Forest Principles, the United Nations Framework Convention on Climate Change and the United Nations Convention on Biological Diversity), a 300-page plan for achieving sustainable development in the 21st century. It was agreed that a five year review of Earth Summit progress would be made in 1997 by the United Nations General Assembly meeting in special session.

#### **Earth Summit+5 (1997): Special Session of the General Assembly to Review and Appraise the Implementation of Agenda 21, New York, 23-27 June 1997**

The root of Earth Summit+5 was from the 1992 Earth Summit where it was agreed that a five year review of progress would be made in 1997 by the United Nations General Assembly meeting in special session [26]. The Commission on Sustainable Development (CSD) was created to monitor and report on implementation of the Earth Summit agreements. This special session of the UN General Assembly took stock of how well countries, international organizations and sectors of civil society have responded to the challenge of the Earth Summit [25 and 24].

#### **United Nations Millennium Summit/Declaration New York, 6-8 September, 2000**

In September of 2000 the largest gathering of world leaders in human history convened for the Millennium Summit at United Nations headquarters in New York [22]. In that pivotal year, representatives from at least 189 Member States of the United Nations met to reflect on their common destiny. The nations were interconnected as never before, with increased globalization promising faster growth,

higher living standards and new opportunities. Yet their citizens' lives were starkly disparate. As some States looked ahead to prosperity and global cooperation, many barely had a future, being mired in miserable, unending conditions of poverty, conflict and a degraded environment [38]. To begin addressing these crises back in 2000, the convened leaders set down the Millennium Declaration, a series of collective priorities for peace and security, poverty reduction, the environment and human rights- essential steps for the advancement of humankind, as well as for the immediate survival for a significant portion of it. Human development, they agreed, is the key to sustaining social and economic progress in all countries, as well as contributing to global security. The nations made a promise which was adopted by world leaders, 'Millennium Declaration' to free people from extreme poverty and multiple deprivations. This pledge became the eight Millennium Development Goals to be achieved by 2015, which provide concrete, numerical benchmarks for tackling extreme poverty in its many dimensions et al [36; 37 and 38]. The MDGs also provide a framework for the entire international community to work coherently together towards a common end- making sure that human development reaches everyone, everywhere. If these goals are achieved, world poverty will be cut by half, tens of millions of lives will be saved, and billions more people will have the opportunity to benefit from the global economy. The eight MDGs break down into 21 quantifiable targets that are measured by 60 indicators [37].

The United Nations Millennium Declaration, signed at the Summit commits world leaders to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women. The MDGs are derived from this Declaration, and all have specific targets and indicators [46]. The MDGs are inter-dependent; all the MDGs influence health, and health influences all the MDGs. For example, better health enables children to learn and adults to earn. Gender equality is essential to the achievement of better health. Reducing poverty, hunger and environmental degradation positively influences, but also depends on, better health [47]. World For World Organization (WFWO) stated emphatically, one world, one hope, the MDGs is common vision and global commitments:-

*"Let's stand up all together with the WFWO to achieve our global commitments and vision of the Millennium Development Goals targets by 2015. We share this small and fragile world with a growing number of our fellow human beings. What happens in one country increasingly affects those who live in other countries as a result of globalization. We will not have a safe and secure world unless we react all against poverty, injustice and*

*inequality. We are the first generation that Can Eradicate Poverty. We have the resources. We know what to do. Let us refuse to miss this opportunity". [45]*

At the Summit the world leaders et al all participated progressively to discuss solutions for global problems such as poverty, housing, war, and the growing gap between industrialized and developing countries. The central focus was the question of how to relieve the global environmental system through the introduction to the paradigm of sustainable development- a concept which emphasizes that economic and social progress depends critically on the preservation of the natural resource base with effective measures to prevent environmental degradation [42 and 9]. That was why the UN at the Millennium Summit made the Millennium declaration and set goals known as the Millennium Development Goals (MDGs), and time-bound targets to be achieved in order to liberate the world from total catastrophe. The United Nation Millennium summit in 2000 called on all countries to work towards a quantified, time-bound set of development targets, which became the Millennium Development Goals. The Millennium Development Goals (MDGs) have become the principal global scorecard for development [22].

For the world community achieve these priorities at the Summit/declaration, further meetings with many world agencies, made the delegation drew up a blueprint for progress/better future: the Millennium Development Goals. By 2015, the leaders pledged, the world would achieve measurable improvements in the most critical areas of human development. The goals establish yardsticks for measuring these results, not just for developing countries but for countries that help to fund development programmes and for the multilateral institutions, like the World Bank or the United Nations Development Programme, that help countries implement them.

### **The Millennium Development Goals (MDGs)**

The Millennium Development Goals (MDGs) are eight international development goals that at least 189 United Nations member states and at least 23 international organizations have agreed to achieve by the year 2015. They include eradicating extreme poverty, reducing child mortality rates, fighting disease epidemics such as AIDS, and developing a global partnership for development [41]. The aim of Millennium Development Goals (MDGs) is to encourage development by improving social and economic conditions in the world's poorest countries. They derive from earlier international development targets [6] and were officially established at the Millennium Summit in 2000, where all world leaders present adopted the United Nations

Millennium Declaration, from which the eight goals were promoted.

The Millennium Development Goals (MDGs) were developed out of the eight chapters of the United Nations Millennium Declaration, signed in September 2000. There are eight goals with 21 targets, and a series of measurable indicators for each target. Goal 1: Eradicate extreme poverty and hunger; Goal 2: Achieve universal primary education; Goal 3: Promote gender equality and empower women; Goal 4: Reduce child mortality rate; Goal 5: Improve maternal health; Goal 6: Combat HIV/AIDS, malaria, and other diseases; Goal 7: Ensure environmental sustainability; and Goal 8: Development Partnership (Working Together) [14; 17; 43; 16; 18 and 22].

Though the Goals are for all humankind, they are seen primarily as being about children- as six of the eight goals relate directly to them. Meeting the last two will also make critical improvements in their lives: (i) Meeting the Goals is most critical for children- Children are most vulnerable when people lack essentials like food, water, sanitation and health care. They are the first to die when basic needs are not met. (ii) Children have rights- Each child is born with the right to survival, food and nutrition, health and shelter, education, and to participation, equality and protection- rights agreed to, among others, in the 1989 international human rights treaty the Convention on the Rights of the Child. The Millennium Development Goals must be met for these basic human rights to be realized. (iii) Reducing poverty starts with children- Helping children reach their full potential is also investing in the very progress of humanity. For it is in the crucial first years that interventions make the biggest difference in a child's physical, intellectual and emotional development. And investing in children means achieving development goals faster, as children constitute a large percentage of the world's poor.

That is where UNICEF came in as a UN organization, it is the only inter-governmental agency devoted exclusively to children and is mandated by the world's governments to promote and protect children's rights and their well being. Along with other UN agencies and global partners, UNICEF has taken the Goals as part of its mandate. From working with local policymakers toward health care and education reform to delivering vaccines, each UNICEF action is a step toward a Millennium Development Goal [39].

### **World Summit on Sustainable Development, 26<sup>th</sup> August- 4<sup>th</sup> September, 2002**

At the 1992 Earth Summit in Rio, the World Summit on Sustainable Development- brought together tens of



thousands of participants, including heads of State and Government, national delegates and leaders from non-governmental organizations (NGOs), businesses and other major groups to focus the world's attention and direct action toward meeting difficult challenges, including improving people's lives and conserving our natural resources in a world that is growing in population, with ever-increasing demands for food, water, shelter, sanitation, energy, health services and economic security. The international community adopted Agenda 21, an unprecedented global plan of action for sustainable development. But the best strategies are only as good as their implementation [19]. It was however noted that progress in implementing sustainable development has been extremely disappointing since the 1992 Earth Summit, with poverty deepening and environmental degradation worsening. What the world wanted, the General Assembly said, was not a new philosophical or political debate but rather, a summit of actions and results [21], which has been reinforced in the MDGs package. Ten years later, the Johannesburg Summit presents an exciting opportunity for today's leaders to adopt concrete steps and identify quantifiable targets for better implementing Agenda 21 [19].

#### **Intermediate Progress Assessments on MDGs:**

##### **The 2005 World Summit New York, 14-16 September 2005: Progress towards the Millennium Development Goals, 2000-2005**

In September, 2005 the UN World Summit reaffirmed the principles in the 2000 millennium declaration and recognized the need for ambitious national development strategies backed by increased international support [10]. When the MDGs were promulgated in 2000, the international community reached back a decade (1990-2000) to establish the baseline. According to UN (2005), in the succeeding five years (2000-2005) the world took stock of its commitments and took the first steps to accelerate progress towards the goals. Undoubtedly, without measures that accelerate change, many countries may fall short of the targets set for 2015.

##### **UN Millennium Summit at UN Headquarters, New York 20-22 September, 2010: Progress towards the Millennium Development Goals, 2000-2010**

A major conference was held in September 2010 was "10 years of Millennium Development Goals- Progress to date and the road ahead." Adopted by world leaders in 2000, the eight Millennium Development Goals (MDGs) are the most broadly supported comprehensive, yet specific development goals the world has ever agreed upon. If these

goals are indeed achieved by 2015 as planned, world poverty will be cut by half, tens of millions of lives will be saved, and billions more people will have the opportunity to benefit from the global economy.

After two-thirds of the time has passed, it was time to take stock of proven initiatives and to discuss action for the road ahead [40]. With only five years left to achieve the MDGs what is needed more than ever is a new kind of cooperation whereby different stakeholders combine their specific expertise, experience, resources and networks to work together in good faith [15]. At the UN Millennium Summit 2010, heads of government from all over the world took stock: until 2015, the share of poor among the world population is to be halved- a goal which the member states of the United Nations had committed to in 2000. Eight Millennium Development Goals (MDGs) were bindingly defined at international level. They stipulate measurable target parameters, e.g. in action fields such as poverty reduction, food safety, gender equality, basic schooling, health care and environment protection.

Ten years later, there are positive reports though still some backlog demand. The number of children not attending school, for instance, has decreased by 33 million to 72 million worldwide. Many more people today have access to clean drinking water compared to ten years ago. And, for the first time in 15 years, the number of those suffering from hunger is declining. This has recently been reported by the UN Food and Agriculture Organization (FAO); good development indeed. However, the number of those suffering from hunger and malnutrition still amounts to almost one billion. As regards the fight against environmental disaster- as can be seen in Pakistan- and the reduction of maternal mortality there is also still need for action. In September 2010, the world recommitted itself to accelerate progress towards these goals [3; 36; 37 and 38], by the collective will to step up our action, responsibilities and commitments, and progress because the MDGs will help us all step into a better world".

### **III. RESEARCH METHODOLOGY**

This section describes the methodology for the study. The qualitative and quantitative research design methods which demand critical and objective review of literature have been adopted in this study and include the descriptive one based on secondary data. The qualitative research method which is essentially to provide descriptions of a case, a group, a situation, an issue, a phenomenon, or an event in what is often called a case study and drawing inferences as well [1 and 2]. The descriptions which are usually in words, picturing not only what happened, but also qualifying the

descriptions with adjectives and adverbs to portray it more clearly. Although hypotheses are not explicitly stated in qualitative research like this, they are usually implied. Here the trustworthiness of evidences gathered is carefully evaluated, and if the evidence is compatible with the consequences of the hypothesis, it is confirmed. But if the evidence is not compatible, or negative the hypothesis had to be rejected. It is through such synthesis that generalizations are established in a research like this. This type of research uses data and information often observed or recorded by others rather than by the researcher. There is the need to validate the authenticity of documents, relics or evidence as well as the data accuracy and relevance.

#### Methods of Data Collection and Analysis

Sources of Data: Sources of information or data in this research include mainly the secondary sources. Though qualitative data sources may include primary [i.e. observation and participant observation (fieldwork), interviews and questionnaires] and secondary [documents and texts, and the researcher's impressions and reactions] [5], this study utilizes mainly the latter. The secondary sources: are documents in which the individual describing the event was not present but obtained his description from someone else, which may or may not have directly observed the event [6 and 7]. Secondary sources of data (except reputable organizations) are usually of limited worth for research purposes because of the errors that may result when information is passed on from one person to another. Secondary sources refer to any materials (books, articles etc.) which have been previously published. Such secondary sources include works of history and encyclopedias, existing literature in journals, texts and internet websites, which are often several times removed from the original, firsthand account of events.

#### Limitation of the Methodology

This research utilized data and information observed or recorded by others rather than by the researcher. The authenticity of documents, relics or evidence as well as the data accuracy and relevance are only validated by the reputation of the organizations from which data were obtained. Generalizations from study as this can only be justified by the available qualitative/historical information. Hence, in this study, the information collected and published in 2010 by 'The World Bank Group' in the period 1990-2010 and those published by United Nations in her 2011 Report among others were utilized. The reliability of the data was based on the reputation of the Organizations as global Institutions that are not likely to be biased in the collection and articulation of their information. In this study, statistical/quantitative analyses were performed on data in order to arrive at objective conclusions.

### IV. DATA PRESENTATION, ANALYSES AND DISCUSSION

Here relevant data and other information obtained are presented and analyzed. The qualitative research method which is essentially to provide descriptions of a case, a group, a situation, an issue, a phenomenon, or an event in what is often called a case study, has been adopted. The case studies include available data on the MDGs. Most of the data utilized are from The World Bank Group (TWBG), United Nations (UN), and United Nations Development Programme (UNDP).

#### Millennium Development Goals (MDGs)

The MDGs were developed out of the eight chapters of the United Nations, signed in September 2000. There are eight goals with 21 targets, and a series of measurable indicators for each target [14; 17; 43; 16; 18; 22 and 27].

Goal 1: Eradicate extreme poverty and hunger. Target 1A: Halve the proportion of people living on less than \$1 a day; -Proportion of population below \$1 per day (PPP values); -Poverty gap ratio [incidence x depth of poverty]; and -Share of poorest quintile in national consumption. Target 1B: Achieve Decent Employment for Women, Men, and Young People: -GDP Growth per Employed Person; -Employment Rate; -Proportion of employed population below \$1 per day (PPP values); -Proportion of family-based workers in employed population. Target 1C: Halve the proportion of people who suffer from hunger: -Prevalence of underweight children under five years of age; -Proportion of population below minimum level of dietary energy consumption [28; 22 and 23]. Goal 2: Achieve universal primary education. Target 2A: By 2015, all children can complete a full course of primary schooling, girls and boys: -Enrollment in primary education; -Completion of primary education; and -Literacy of 15-24 year olds, female and male [29]. Goal 3: Promote gender equality and empower women. Target 3A: Eliminate gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015: -Ratios of girls to boys in primary, secondary and tertiary education; -Share of women in wage employment in the non-agricultural sector; and -Proportion of seats held by women in national parliament [30].

Goal 4: Reduce child mortality rates. Target 4A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate: -Under-five mortality rate; -Infant (under 1) mortality rate; and -Proportion of 1-year-old children immunized against measles [31]. Goal 5: Improve maternal health. Target 5A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio: -Maternal mortality ratio; and -Proportion of births attended by skilled health personnel. Target 5B: Achieve, by 2015, universal access to reproductive health: -Contraceptive prevalence rate; -Adolescent birth rate; -Antenatal care coverage; and -

Unmet need for family planning [32]. Goal 6: Combat HIV/AIDS, malaria, and other diseases. Target 6A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS: -HIV prevalence among population aged 15–24 years; -Condom use at last high-risk sex; -Proportion of population aged 15–24 years with comprehensive correct knowledge of HIV/AIDS. Target 6B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it: -Proportion of population with advanced HIV infection with access to antiretroviral drugs. Target 6C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases: -Prevalence and death rates associated with malaria; -Proportion of children under 5 sleeping under insecticide-treated bed-nets; -Proportion of children under 5 with fever who are treated with appropriate anti-malarial drugs; -Prevalence and death rates associated with tuberculosis; and -Proportion of tuberculosis cases detected and cured under DOTS (Directly Observed Treatment Short Course) [33].

Goal 7: Ensure environmental sustainability. Target 7A: Integrate the principles of sustainable development into country policies and programs; reverse loss of environmental resources. Target 7B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss: -Proportion of land area covered by forest; -CO<sub>2</sub> emissions, total, per capita and per \$1 GDP (PPP); -Consumption of ozone-depleting substances; -Proportion of fish stocks within safe biological limits; -Proportion of total water resources used; -Proportion of terrestrial and marine areas protected; -Proportion of species threatened with extinction. Target 7C: Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation (for more information see the entry on water supply): -Proportion of population with sustainable access to an improved water source, urban and rural; and -Proportion of urban population with access to improved sanitation. Target 7D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum-dwellers: -Proportion of urban population living in slums [34].

Goal 8: Develop a global partnership for development. Target 8A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system: -Includes a commitment to good governance, development, and poverty reduction – both nationally and internationally. Target 8B: Address the Special Needs of the Least Developed Countries (LDC): -Includes: tariff and quota free access for LDC exports; enhanced programme of debt relief for HIPC and cancellation of official bilateral debt; and more generous ODA (Overseas Development Assistance) for countries committed to poverty reduction. Target 8C: Address the special needs of landlocked developing countries and Small Island developing States: -Through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly. Target 8D: Deal comprehensively with the debt problems of developing countries through national

and international measures in order to make debt sustainable in the long term.

Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and Small Island developing States.

-Official development assistance (ODA): --Net ODA, total and to LDCs, as percentage of OECD /DAC donors' GNI; --Proportion of total sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation); --Proportion of bilateral ODA of OECD/DAC donors that is untied; --ODA received in landlocked countries as proportion of their GNIs; --ODA received in Small Island developing States as proportion of their GNIs. -Market access: --Proportion of total developed country imports (by value and excluding arms) from developing countries and from LDCs, admitted free of duty; --Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries; --Agricultural support estimate for OECD countries as percentage of their GDP; --Proportion of ODA provided to help build trade capacity. -Debt sustainability: --Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative); --Debt relief committed under HIPC initiative, US\$; --Debt service as a percentage of exports of goods and services.

Target 8E: In co-operation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries. -Proportion of population with access to affordable essential drugs on a sustainable basis. Target 8F: In co-operation with the private sector, make available the benefits of new technologies, especially information and communications. -Telephone lines and cellular subscribers per 100 population; -Personal computers in use per 100 population; and -Internet users per 100 Population [35].

### Data Presentation/Analyses

Though first parts of the analyses were combined with the data presented in this section, the final parts are however in the succeeding section.

### Goal 1: Eradicate extreme poverty and hunger

Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar (\$1) a day; Target 1.B: Achieve full and productive employment and decent work for all, including women and young people; Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger (TABLE I).

TABLE I (a)  
GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER

	Data				
Indicator	1990	1995	2000	2005	2009
Employment to population ratio, 15+, total (%)	62	62	61	61	61
Employment to population ratio, ages 15-24, total (%)	53	50	47	45	45
GDP per person employed (constant 1990 PPP \$)	11,914	12,665	13,890	15,683	17,254
Income share held by lowest 20%	..	..	..	..	..
Malnutrition prevalence, weight for age (% of children under 5)	29.44*	..	25	..	21
Poverty gap at \$1.25 a day (PPP) (%)	..	..	..	..	..
Poverty headcount ratio at \$1.25 a day (PPP) (% of population)	..	..	..	..	..
Vulnerable employment, total (% of total employment)	..	..	..	..	..
<b>Total</b>					

**Data Source:** [11]; (Figures in italics refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE I (b)  
GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER

	Analysis					
Indicator	Rate (2000 - 2009)	Projection 2015 (P)	Target T	MOD P-T/T	I	G
Employment to population ratio, 15+, total (%)	0	61	100	-0.39	-1	-1
Employment to population ratio, ages 15-24, total (%)	-0.22	43.68	100	-0.56	-1	
GDP per person employed (constant 1990 PPP \$)	+373.78	19496.67	13,890	+0.40	+1	
Income share held by lowest 20%						
Malnutrition prevalence, weight for age (% of children under 5)	-0.44	18.33	14.72	-0.25	-1	
Poverty gap at \$1.25 a day (PPP) (%)						
Poverty headcount ratio at \$1.25 a day (PPP) (% of population)						
Vulnerable employment, total (% of total employment)						
<b>Total</b>				-0.80	-2	-1






**Source:** Author's current work (2012)

### Goal 2: Achieve universal primary education

Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling (TABLE II)








TABLE II (a)  
GOAL 2: ACHIEVE UNIVERSAL PRIMARY  
EDUCATION

	Data				
Indicator	1990	1995	2000	2005	2009
Literacy rate, youth female (% of females ages 15-24) 	79	..	84	..	87
Literacy rate, youth male (% of males ages 15-24) 	88	..	90	..	92
Persistence to last grade of primary, total (% of cohort) 	..	..	..	..	..
Primary completion rate, total (% of relevant age group) 	79	..	82	86	88
Total enrollment, primary (% net) 	..	..	84	88	90
<b>Total</b>					

**Data Source:** [11]; (Figures in italics refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE II (b)  
GOAL 2: ACHIEVE UNIVERSAL PRIMARY  
EDUCATION

	Analysis					
Indicator	Rate (2000-2009)	Projection 2015 P	Target T	MOD P-T/T	I	G
Literacy rate, youth female (% of females ages 15-24) 	+0.33	89	100	-0.11	-1	-1
Literacy rate, youth male (% of males ages 15-24) 	+0.22	93.33	100	-0.07	-1	
Persistence to last grade of primary, total (% of cohort) 	-	-	-	-	-	
Primary completion rate, total (% of relevant age group) 	+0.67	92	100	-0.08	-1	
Total enrollment, primary (% net) 	+0.67	94	100	-0.06	-1	
<b>Total</b>				-0.32	-4	

**Source:** Author's current work (2012)

**Goal 3: Promote gender equality and empower women**

Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015 (TABLE III)

TABLE III (a)  
GOAL 3: PROMOTE GENDER EQUALITY AND  
EMPOWER WOMEN

	Data				
Indicator	1990	1995	2000	2005	2009
Proportion of seats held by women in national parliaments (%)	13	12	14	16	19
Ratio of female to male primary enrollment (%)	89	..	92	95	96
Ratio of female to male secondary enrollment (%)	83	..	92	95	97
Ratio of female to male tertiary enrollment (%)	..	..	99	105	109
Share of women employed in the nonagricultural sector (% of total nonagricultural employment)	34.8	37.0	36.4	36.7	..
<b>Total</b>					

**Data Source:** [11]; (Figures in italics refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE III (b) GOAL 3: PROMOTE GENDER  
EQUALITY AND EMPOWER WOMEN

	Analysis					
Indicator	Rate (2000-2009)	Projection 2015 P	Target T	MOD P-T/T	I	G
Proportion of seats held by women in national parliaments (%)	+0.56	22.33	50	-0.55	-1	-1
Ratio of female to male primary enrollment (%)	+0.44	98.67	100	-0.01	-1	
Ratio of female to male secondary enrollment (%)	+0.56	100.33	100	0.00	0	
Ratio of female to male tertiary enrollment (%)	+1.11	115.67	100	+0.16	+1	
Share of women employed in the nonagricultural sector (% of total nonagricultural employment)	+0.06	37.3	50	-0.25	-1	
<b>Total</b>				-0.65	-2	-1

**Source:** Author's current work (2012)

**Goal 4: Reduce child mortality**

Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate (TABLE IV)

TABLE IV (a)  
GOAL 4: REDUCE CHILD MORTALITY

	Data				
Indicator	1990	1995	2000	2005	2009
Immunization, measles (% of children ages 12-23 months) <i>†</i>	73	74	72	78	82
Mortality rate, infant (per 1,000 live births) <i>†</i>	64	61	55	48	43
Mortality rate, under-5 (per 1,000) <i>†</i>	92	88	79	68	61
<b>Total</b>					

**Data Source:** [11]; (Figures in italics refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE IV (b)  
GOAL 4: REDUCE CHILD MORTALITY

	Analysis					
Indicator	Rate (2000-2009)	Projection 2015 (P)	Target T	MOD P-T/100	I	G
Immunization, measles (% of children ages 12-23 months) <i>†</i>	+1.11	88.65	100	-0.11	-1	-1
Mortality rate, infant (per 1,000 live births) <i>†</i>	-1.33	35	21.33	-0.64	-1	
Mortality rate, under-5 (per 1,000) <i>†</i>	-2.00	49	30.67	-0.60	-1	
<b>Total</b>				-1.35	-3	-1

**Source:** Author's current work (2012)

#### Goal 5: Improve maternal health

Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio; Target 5.B: Achieve, by 2015, universal access to reproductive health (TABLE V)

TABLE V (a)  
GOAL 5: IMPROVE MATERNAL HEALTH

	Data				
Indicator	1990	1995	2000	2005	2009
Adolescent fertility rate (births per 1,000 women ages 15-19)	73 *	67	63	57	54
Births attended by skilled health staff (% of total)	50	..	62	..	65
Contraceptive prevalence (% of women ages 15-49)	57	..	61	..	61
Maternal mortality ratio (modeled estimate, per 100,000 live births)	400	370	340	290	260
Pregnant women receiving prenatal care (%)	..	..	75	..	82
Unmet need for contraception (% of married women ages 15-49)	..	..	..	..	..
<b>Total</b>					

**Data Source:** [11]; (Figures in *italics* refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE V (b)  
GOAL 5: IMPROVE MATERNAL HEALTH

	Analysis					
Indicator	Rate (2000-2009)	Projection 2015 P	Target T	MOD P-T/T	I	G
Adolescent fertility rate (births per 1,000 women ages 15-19)	-1.00	48	18.25	-1.63	-1	-1
Births attended by skilled health staff (% of total)	+0.33	67	100	-0.33	-1	
Contraceptive prevalence (% of women ages 15-49)	0	61	100	-0.39	-1	
Maternal mortality ratio (modeled estimate, per 100,000 live births)	8.89	206.67	100	-1.07	-1	
Pregnant women receiving prenatal care (%)	0.78	86.67	100	-0.13	-1	
Unmet need for contraception (% of married women ages 15-49)						
<b>Total</b>				-3.55	-5	-1

**Source:** Author's current work (2012)









**Goal 6: Combat HIV/AIDS, malaria, and other diseases**

Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it










Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases (TABLE VI)

TABLE VI (a)  
GOAL 6: COMBAT HIV/AIDS, MALARIA, AND  
OTHER DISEASES

Indicator	Data				
	1990	1995	2000	2005	2009
Children with fever receiving antimalarial drugs (% of children under age 5 with fever) 	..	..	..	..	..
Condom use, population ages 15-24, female (% of females ages 15-24) 	..	..	..	..	..
Condom use, population ages 15-24, male (% of males ages 15-24) 	..	..	..	..	..
Incidence of tuberculosis (per 100,000 people) 	128	129	136	141	137
Prevalence of HIV, female (% ages 15-24) 	..	..	..	..	0.7
Prevalence of HIV, male (% ages 15-24) 	..	..	..	..	0.4
Prevalence of HIV, total (% of population ages 15-49) 	0.3	0.8	1.0	1.0	0.8
Tuberculosis case detection rate (% all forms) 	55	46	45	56	62
<b>Total</b>					

**Data Source:** [11]; (Figures in italics refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE VI (b)  
GOAL 6: COMBAT HIV/AIDS, MALARIA, AND  
OTHER DISEASES

Indicator	Analysis					
	Rate (2000-2009)	Projection 2015 P	Target T	MOD P-T/T	I	G
Children with fever receiving antimalarial drugs (% of children under age 5 with fever) 						+1
Condom use, population ages 15-24, female (% of females ages 15-24) 						
Condom use, population ages 15-24, male (% of males ages 15-24) 						
Incidence of tuberculosis (per 100,000 people) 	-3.00	119	143	+0.17	+1	
Prevalence of HIV, female (% ages 15-24) 						
Prevalence of HIV, male (% ages 15-24) 						
Prevalence of HIV, total (% of population ages 15-49) 						
Prevalence of HIV, total (% of population ages 15-49) 	-0.05	0.52	1.10	+0.53	+1	
Tuberculosis case detection rate (% all forms) 	+1.89	73.33	100	-0.27	-1	
<b>Total</b>				+0.43	+1	+1

**Source:** Author's current work (2012)



**Goal 7: Ensure environmental sustainability**

Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources








Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss

Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers








(TABLE VII)

TABLE VII (a)  
**GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY**

	Data				
Indicator	1990	1995	2000	2005	2009
CO2 emissions (kg per PPP \$ of GDP) 	1	1	1	1	..
CO2 emissions (metric tons per capita) 	4	4	4	5	5
Forest area (% of land area) 	32.1	..	31.4	31.3	31.1
Improved sanitation facilities (% of population with access) 	52	55	57	59	61
Improved water source (% of population with access) 	77	80	83	85	87
Marine protected areas (% of territorial waters) 	5	6	8	9	9
Net ODA received per capita (current US\$) 	11	10	8	17	19
<b>Total</b>					

**Data Source:** [11]; (Figures in italics refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE VII (b)  
**GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY**

	Analysis					
Indicator	Rate (2000-2009)	Projection 2015 P	Target T	MOD P-T/T	I	G
CO2 emissions (kg per PPP \$ of GDP) 	0	1	1	0.00	0	+1
CO2 emissions (metric tons per capita) 	-0.2	3.8	5.4	+0.30	+1	
Forest area (% of land area) 	-0.03	30.9	31.4	+0.02	+1	
Improved sanitation facilities (% of population with access) 	+0.44	67.67	76	-0.11	-1	
Improved water source (% of population with access) 	+0.44	89.67	88.5	+0.01	+1	
Marine protected areas (% of territorial waters) 	-0.25	7.5	10	-0.25	-1	
Net ODA received per capita (current US\$) 	+1.22	26.33	8	+2.29	+1	
<b>Total</b>				+2.26	+2	+1

Source: Author's current work (2012)

**Goal 8: Develop a global partnership for development**

Target 8.A: Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system Includes a commitment to good governance, development and poverty reduction – both nationally and internationally  
Target 8.B: Address the special needs of the least developed countries Includes: tariff and quota free access for the least developed countries' exports; enhanced

programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction

Target 8.C: Address the special needs of landlocked developing countries and Small Island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly)

Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term

Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries

Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications (TABLE VIII)

TABLE VIII (a)  
GOAL 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT

	Data				
Indicator	1990	1995	2000	2005	2009
Debt service (PPG and IMF only, % of exports, excluding workers' remittances)	..	..	..	..	..
Internet users (per 100 people)	0.1	0.8	6.7	16.0	27.1
Mobile cellular subscriptions (per 100 people)	0	2	12	34	69
Telephone lines (per 100 people)	10	12	16	19	18
Fertility rate, total (births per woman)	3	3	3	3	3
<b>Total</b>					

**Data Source:** [11]; (Figures in italics refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE VIII (b)  
GOAL 8: DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT








	Analysis					
Indicator	Rate (2000-2009)	Projection 2015 P	Target T	MOD P-T/T	I	G
Debt service (PPG and IMF only, % of exports, excluding workers' remittances)						
Internet users (per 100 people)	+2.27	40.7	6.7	+5.08	+1	+1
Mobile cellular subscriptions (per 100 people)	+6.33	107	12	+7.92	+1	
Telephone lines (per 100 people)	+0.22	19.33	16	+0.21	+1	
Fertility rate, total (births per woman)	0.00	3	3	0.00	+1	
<b>Total</b>				+13.21	+4	+1

**Source:** Author's current work (2012)

**Others**








This includes other issues known to aid achievement of the goals (TABLE IX)

TABLE IX (a)  
OTHERS

Indicator	Data				
	1990	1995	2000	2005	2009
GNI per capita, Atlas method (current US\$) 	4,075	5,060	5,293	7,132	8,721
GNI, Atlas method (current US\$) (billions) 	21,508.5	28,782.5	32,206.5	46,130.9	59,099.8
Gross capital formation (% of GDP) 	23.4	22.3	22.3	21.9	19.0
Life expectancy at birth, total (years) 	65	66	67	68	69
Literacy rate, adult total (% of people ages 15 and above) 	76	..	82	..	84
Population, total (billions) 	5.3	5.7	6.1	6.5	6.8
Trade (% of GDP) 	38.0	41.8	48.8	53.7	48.5
<b>Total</b>					

**Data Source:** [11]; (Figures in italics refer to periods other than those specified); \*Data obtained by projection from existing data.

TABLE IX (b)  
OTHERS

Indicator	Analysis					
	Rate (2000-2009)	Projection 2015 P	Target T	MOD= (P-T/T)	I	G
GNI per capita, Atlas method (current US\$) 	+380.89	11006.33	5,293	+1.08	+1	+1
GNI, Atlas method (current US\$) (billions) 	+2988.14	77028.67	32,206.5	+1.39	+1	
Gross capital formation (% of GDP) 	-0.37	16.8	22.3	-0.25	-1	
Life expectancy at birth, total (years) 	+0.22	70.33	67	+0.05	+1	
Literacy rate, adult total (% of people ages 15 and above) 	+0.22	85.33	82	+0.04	+1	
Population, total (billions) 	+0.08	7.27	6.1	+0.19	+1	
Trade (% of GDP) 	-3.25	29	48.8	-0.41	-1	
<b>Total</b>				+2.09	+3	+1

**Source:** Author's current work (2012)

**Summary of Analyses**

Summary of analyses which were started in the preceding section are hereby presented.

TABLE X  
SUMMARY OF ANALYSES

Goals	N	$\Sigma \text{MOD} = \Sigma (\text{P-T/T})$	$\text{MODPUI} = \Sigma (\text{MOD/N})$	I	G
Goal 1: Eradicate extreme poverty and hunger	4	-0.80	-0.20	-2	-1
Goal 2: Achieve universal primary education	4	-0.32	-0.08	-4	-1
Goal 3: Promote gender equality and empower women	5	-0.65	-0.13	-2	-1
Goal 4: Reduce child mortality	3	-1.35	-0.45	-3	-1
Goal 5: Improve maternal health	5	-3.55	-0.71	-5	-1
Goal 6: Combat HIV/AIDS, malaria, and other diseases	3	+0.43	+0.14	+1	+1
Goal 7: Ensure environmental sustainability	7	+2.26	+0.32	+2	+1
Goal 8: Develop a global partnership for development	4	+13.21	+3.30	+4	+1
Others	7	+2.09	+0.30	+3	+1
Total	42	+11.32	-	-6	-1
Average per Indicator	-	+0.27	-	-0.14	-0.02
Average per Item	-	+1.26	+0.29	-0.67	-0.11

Source: Author's current work (2012)

N: The number of indicators computed under each goal based on available data

MOD: Measurement Of Deviation (also known as attainment target index), with negative (-ve) value indicating deficiency, '0' indicating no deficiency, and positive (+ve) value indicating crossing the border of neutrality to real attainment for each indicator.

MODPUI: Measurement Of Deviation (MOD) Per Unit Indicator under each goal (Average MOD)

I: Relative values assigned to each indicator based on its MOD, '-1' indicating deficiency, '0' indicating no deficiency, and '+1' indicating crossing the border of neutrality to real attainment.

G: Relative values assigned to each goal based on the  $\Sigma \text{MOD}$  of all indicators therein, '-1' indicating deficiency, '0' indicating no deficiency, and '+1' indicating crossing the border of neutrality to real attainment.

Y: the sum of MODs (Measurement Of Deviation), with negative (-ve) value indicating deficiency, '0' indicating no deficiency, and positive (+ve) value indicating crossing the border of neutrality to real attainment for each indicator.

$$Y = \Sigma \text{MOD} = \Sigma N_i (\text{MODPUI}) = +11.32$$

Analyses performed on data include Factorial Deviation method of analysis, and deviations of indicators and the goals. Factorial measurement of deviation was on individual indicator; with corresponding relative value for each indicator and for each goal also assessed.

Using Factorial Deviation method of analysis and deviations of indicators and the goals, analyses showed Positive (+ve)  $\Sigma \text{MOD}$  indicating crossing the border of neutrality to real attainment in Goals 6-8 and Others, with highest '+ve'  $\Sigma \text{MOD}$ , indicating great achievement recorded in Goal 8 with a value of '+13.30' followed by Goal 7 and 'Other' with values of '+2.26' and '+2.09' respectively. Negative (-ve)  $\Sigma \text{MOD}$  indicating deficiency to the border of neutrality in Goals 1-5, with highest '-ve'  $\Sigma \text{MOD}$  was recorded in Goal 5 with a value of '-3.55' followed by Goal 4 and Goal 1 with values of '-1.35' and '-0.80' respectively.

The sum of Measurement Of Deviation for each indicator ( $\Sigma \text{MOD}$ ), which deals with actual values of deficiencies and real attainments in all assessed indicators is '+11.32'.

### Regression Models and Assessment of Correlation

A regrouping of goals with equal number of indicators for variable 'X' and average value of 'MOD' for all the goals in the group for variable 'Y'. A regression of Y on X is represented by the equation:  $Y = mX + c$

Where Y= independent variables; X=independent variables;  
c= constant and m= gradient of the regressed line.

#### Regression of Y on X:

A regression performed on regrouped goals with equal number of indicators for variable 'X' and average value of 'MOD' for all the goals in the group for variable 'Y'

TABLE XI  
REGRESSION OF Y ON X

X	Y	XY	X <sup>2</sup>	Y <sup>2</sup>
3x2= 6	-0.46	-2.76	36	+0.21
5x2= 10	-2.1	-21	100	+4.41
4x3= 12	+4.03	+48.36	144	+16.24
7x2= 14	+2.18	+30.52	196	+4.75
42	+3.65	+55.12	476	+25.61

Source: Author's current work (2012)

$$\sum XY = m \sum X^2 + c \sum X$$

$$\sum Y = m \sum X + N c$$

Substituting figures in the equations showed that, the regression equation

$Y = mX + c = 0.48X - 4.3$  and that the corresponding Ys for  $X_0$ ,  $X_6$ ,  $X_{8.96}$  and  $X_{14}$  are -4.30, -1.42, 0.00 and +2.42 respectively. The sum of XY of the regression line for  $X_6$  to  $X_{14}$  is +8.00

14

$$\sum XY = +8.00$$

6

### Correlation between X and Y:

TABLE XII  
CORRELATION BETWEEN X AND Y

X	Y	(X-X <sup>1</sup> )	(Y-Y <sup>1</sup> )	(X-X <sup>1</sup> )(Y-Y <sup>1</sup> )	(X-X <sup>1</sup> ) <sup>2</sup>	(Y-Y <sup>1</sup> ) <sup>2</sup>
3x2= 6	-0.46	-4.50	-1.37	+6.17	+20.25	+1.88
5x2= 10	-2.1	-0.50	-3.01	+1.51	+0.25	+9.06
4x3= 12	+4.03	+1.50	+3.12	+4.68	+2.25	+9.73
7x2= 14	+2.18	+3.5	+1.27	+4.45	+12.25	+1.61
42	+3.65			+16.81	+35.00	+22.28

Source: Author's current work (2012)

$X^1 = 10.50$  ;  $Y^1 = 0.91$  ; where  $X^1$  and  $Y^1$  are the mean values of variables X and Y

Karl Pearson Product Moment Correlation 'r' is calculated by

$$r = \frac{\sum (X-X^1)(Y-Y^1)}{\sqrt{\sum (X-X^1)^2 \sum (Y-Y^1)^2}} = +0.60$$

A 'r' of '+0.60' in the upper portion of the positive shows a very good correlation between X and Y.

### Discussion

A regression performed on regrouped goals with equal number of indicators for variable 'X' and average value of 'MOD' for all the goals in the group for variable 'Y'

A regression of Y on X is represented by the equation:  $Y = mX + c = 0.48X - 4.3$  and that the corresponding Ys for  $X_0$ ,  $X_6$ ,  $X_{8.96}$  and  $X_{14}$  are -4.30, -1.42, 0.00 and +2.42 respectively. The sum of XY of the regression line for  $X_6$  to  $X_{14}$  is +8.00. A coefficient of correlation 'r' of '+0.60' falls in the upper half of positive correlation between X and Y. The 'high value' agreement of the sum of MOD (which can also be referred to as the attainment target index ) value of '+11.32' and the sum of XY of the regression line for  $X_6$  to  $X_{14}$  of +8.00 are indications that by Y2015, the MDGs are attainable if current trends are at least maintained or positively intensified.



## V. SUMMARY, RECOMMENDATIONS AND CONCLUSION

### Summary

This study assessed the trends in the global developments since inception of the agenda to precisely predict what the level of attainment would be at the end of the set duration. Though the UN Conferences/summits/agendas have helped to define for the world a comprehensive vision for the future of humanity, it was observed that progress towards reaching the MDGs in the present case has been uneven. Some countries have achieved many of the goals, while others are not on track at all to realize any. The major countries that have been achieving their goals include China (whose poverty population has reduced from 452 million to 278 million) and India due to clear internal and external factors of population and economic development. However, areas needing the most reduction, such as the Sub-Saharan Africa regions have yet to make any drastic changes in improving their quality of life. In the same time as China, the Sub-Saharan Africa reduced their poverty about one percent, and are at a major risk of not meeting the MDGs by 2015. The eighth Goal has reminded us that the development challenges differ for large countries and small countries. The developing countries need access to new technologies to increase productivity and improve peoples' lives. The consensus called on developing countries to improve governance and policies aimed at increasing economic growth and reducing poverty and for high-income countries to provide more and better aid and greater access to their markets.

### Recommendations

The positive attainment in Goals 6 to 8 and 'Others' (Goal 6: Combat HIV/AIDS, malaria, and other diseases, Goal 7: Ensure environmental sustainability, Goal 8: Develop a global partnership for development, and 'Others') as classified- must not only be maintained but to be improved upon, inclusive of all the indicators for which there are no data now. The negative attainment in Goals 1 to 5 (Goal 1: Eradicate extreme poverty and hunger, Goal 2: Achieve universal primary education, Goal 3: Promote gender equality and empower women, Goal 4: Reduce child mortality, and Goal 5: Improve maternal health), must be improved upon unto positive attainment, inclusive of all the indicators for which there are no data now.

As only 42 out of 60 indicators (70%) have quantifiable data right now, efforts must be made by the UN and other concerned global organizations towards ensuring that quantifiable data are available for the remaining 18 indicators (30%) as well. It is recommended that all indicators (hence goals) and all those with negative '-ve'

values must be improved upon unto positive '+ve' values, which can only be guaranteed by intensifying efforts for attainment of real '+ve' values. It is recommended that all indicators (hence goals) with '-ve' values must be improved upon unto '+ve', and this can only be guaranteed if efforts are intensified to ensure that all the 60 indicators have real '+ve' values.

### Suggested Areas of Research

As a result of the scope of this research, it is being suggested that studies be carried out on (i) the outcomes or performances of various UN conferences such as HABITAT, Environment and Development (UNCED), etc. and (ii) this subject, 'the Millennium Development Goals (MDGs)' in 2013 and/or 2014, the penultimate year 2015, which is the set year for its attainment.

### Conclusion

It was noted that remarkable achievement in Goal 8 (Develop a global partnership for development) is an indication that since 2000 there is general trend of narrowing gap between industrialized and developing countries. From the discussion on analyses, the 'high value' agreement of the sum of MOD (also known as the attainment target index ) value of '+11.32' and the sum of XY of the regression line for  $X_6$  to  $X_{14}$  of +8.00 are indications that by Y2015, the MDGs are attainable if current trends are at least maintained or positively intensified. With the UN Conferences and all that have been established to achieve particularly the MDGs among others, there is hope of greater improvement for humanity and our inhabited planet earth.

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